

| | | | |
|----|--|----|--|
| 1 | MAGNETIC SEPARATING MEANS | 29 | ..Electrode or part thereof moved on or against another |
| 2 | ..Electromagnet | | |
| 3 | ..And electric field separation apparatus | 30 | ..With shutdown or voltage adjustment means interrelated with cleaning (e.g., cutting off flow of gaseous fluid mixture or electrical current, etc.) |
| 4 | APPARATUS FOR SELECTIVE DIFFUSION OF GASES (E.G., SEMIPERMEABLE MEMBRANE, ETC.) | | |
| 5 | ..Immobilized liquid membrane | 31 | ...Sequential operation |
| 6 | ..Membrane to degasify liquid | 32 | ..Vibrating, jarring, or rapping means |
| 7 | ..Plural separate barriers | | |
| 8 | ..Parallel hollow fibers or cylinders (e.g., bundled, etc.) | 33 | ...Mounted on rotatable shaft (e.g., swinging arm or hammer, etc.) |
| 9 | ..Barriers connected in series | | |
| 10 | ..Hollow fiber or cylinder | 34 |Having reciprocating rod or piston type activating or rapping means |
| 11 | ..Plural layers (e.g., laminated barrier, etc.) | 35 |Activated by second swinging or rotatable means |
| 12 | ..Organic compound containing layer | 36 | ...Magnet or solenoid activating means |
| 13 | ...Ring containing organic compound | 37 | ...Reciprocating rod or piston type activating or rapping means |
| 14 | ..Membrane having ring containing organic compound | | |
| 15 | ELECTRIC FIELD SEPARATION APPARATUS (E.G., ELECTRICAL PRECIPITATOR, ELECTROSTATIC TYPE, ETC.) | 38 | ...Horizontal striking means |
| | | 39 | ..Movably mounted electrode |
| 16 | ..And radioactive or ultraviolet light ionizer | 40 | ...Nonliquid contact cleaning means |
| 17 | ..Electric charge produced by friction (e.g., by gas flow, etc.) | 41 | ...Liquid bath for immersion of electrode |
| 18 | ..With control means responsive to sensed condition | 42 |Endless belt carried or belt type electrode |
| 19 | ..Concentration or temperature sensing means | 43 | ..Fluid contacting means (e.g., suction means, etc.) |
| 20 | ..Arc, spark, or flashover sensing means | 44 | ...Liquid applying means for electrode (e.g., projection type, etc.) |
| 21 | ...Current sensing means | 45 |Weir or overflow wet film type |
| 22 | ..Current sensing means | 46 |Having movable spraying means for liquid |
| 23 | ...And voltage sensing means | 47 |Including means to recirculate liquid |
| 24 | ..Voltage sensing means | 48 |Including baffle for directing gas flow |
| 25 | ..With programmed, cyclic, or time responsive control means | 49 |Cylindrical electrode |
| 26 | ..With indicating, signal, or alarm means | 50 | ...Apparatus purging or flushing means using gas or liquid |
| 27 | ..With means to add charged solid or liquid particles to gaseous fluid mixture | 51 | ..Electrode scraping, brushing, or wiping means |
| 28 | ..Electrode cleaner, apparatus part flusher, discharger, or wet collector (e.g., wet film electrode, etc.) | 52 | ..With means for vapor or liquid contact (e.g., for gas separation, cooling, conditioning, etc.) |

| | | | |
|----|---|-----|--|
| 53 | ..Liquid spray means | 78 | ...Adjacent parallel collector electrodes are differently charged |
| 54 | .Having alternating electrostatic field | | |
| 55 | .And serially arranged nonelectrical separator | 79 |Collecting electrodes are flat plates |
| 56 | ..Bypass or modification of flow of gaseous fluid mixture to second stage | 80 | .With details of voltage supply means or circuitry |
| 57 | ..Precedent nonelectrical separator | 81 | ..Closure interlock or removable section |
| 58 | ...Separator is single porous filter | 82 | ..Circuit portions |
| 59 | ..Total flow of gaseous fluid mixture through porous collector electrode | 83 | .Electrode retaining or supporting means |
| 60 | .Including gas flow distribution means | 84 | ..Plural electrode unit assembly type (e.g., unitized, etc.) |
| 61 | ..Spiralling inflow, centrifugal, or whirl generating surface means | 85 | ...Disposable (e.g., collapsible or foldable cardboard, etc.) |
| 62 | ..For contact with ionizing electrode or uniform flow in treating zone | 86 | ...Parallel disk or plate collector unit |
| 63 | ...Having means for driving gas flow (e.g., fan, blower, etc.) | 87 | ..Parallel disk or plate collector |
| 64 | ...Perforated baffle or gas diffuser | 88 | ..With insulation feature |
| 65 | ..Collecting electrode modifies gas flow | 89 | ..Tensioning means |
| 66 | ...Total flow of gaseous fluid mixture through interstitial or porous collector | 90 | ...Spring or expansible bellows |
| 67 |Zigzag running length | 91 | ...Hanging weight |
| 68 |Particle type collector | 92 | ..Suspensory means |
| 69 | ...Layered, laminated, or coated | 93 | ...Nonrigid support (e.g., hanging electrode, etc.) |
| 70 | ...Plural separate electrode members aligned in direction of gas flow | 94 | ..Movably supported during use or for orientation |
| 71 | ...Segmented electrode | 95 | .Ionizing electrode details (e.g., coil, mat, corona suppression, etc.) |
| 72 | ...Continuous electrode with integral or attached projections | 96 | ..Filamentary or filar form |
| 73 | ..Flow distribution means for parallel sections | 97 | ..Sharpened point, serrated, or tip discharge |
| 74 | .With nonelectrical gas treating or conditioning means | 98 | .Collecting electrode details (e.g., sheet type, running length web, etc.) |
| 75 | .Plural diverse electric fields | 99 | ..Dielectric material containing or covering |
| 76 | ..One or more electrodes common to plural fields | 100 | ..Multiple similar elements or sections (e.g., built up, etc.) |
| 77 | ..Serially arranged ionizing and collecting or agglomerating fields | 101 | CHROMATOGRAPHY TYPE APPARATUS |
| | | 102 | .With control means responsive to sensed condition |
| | | 103 | .With programmed, cyclic, or time responsive control means |
| | | 104 | .Plural separate and distinct stages |
| | | 105 | .Including injection system or inlet fluid distributor |
| | | 106 | .Having system connector or coupling |

| | | | |
|-------|--|-----|---|
| 107 | ..Having imbedded baffle or flow distributor | 139 | ..Including baffle for modifying gas flow (e.g., flow vanes, diffuser, etc.) |
| 108 | SOLID SORBENT APPARATUS | 140 | ...And means for driving gas flow |
| 109 | ..With control means responsive to sensed condition | 141 | ...And means regenerating solid sorbent |
| 110 | ..Fluid flow sensing means | 142 | ..With means for driving gas flow |
| 111 | ..Concentration sensing means | 143 | ..With means regenerating solid sorbent |
| 112 | ..Temperature sensing means | 144 | ..Gas contacting means |
| 113 | ..Pressure sensing means | 145 | ...Means applies steam to solid sorbent |
| 114 | ...And programmed, cyclic, or time responsive control means | 146 | ..Heat exchanger to regenerate |
| 115 | ..With programmed, cyclic, or time responsive control means | 147 | ..Having mountable casing |
| 116 | ..Regulating or metering means | 148 | ..Storage or food receptacle |
| 117 | ..Indicating, signal, or alarm means | 149 | ..With means to compress or compact solid sorbent bed |
| 117.5 | ..With indicating means (e.g., color change indicator, etc.) | 150 | ..Movable solid sorbent bed (e.g., fluidized bed, etc.) |
| 118 | ..Soluble or deliquescent type (e.g., calcium chloride, etc.) | 151 | ..Including means to access or replace solid sorbent |
| 119 | ..Supported by holder with drip openings | 152 | ..Including baffle for modifying gas flow (e.g., imbedded in solid sorbent, etc.) |
| 120 | ...Including liquid contacting means | 153 | ..Dispersed or impregnated solid sorbent bed |
| 121 | ..Plural solid sorbent beds | 154 | ..Layered or laminated (e.g., solid sorbent on support material, etc.) |
| 122 | ..With recovery or separation means for desorbing fluid | 155 | DEGASIFYING MEANS FOR LIQUID |
| 123 | ...Movable solid sorbent bed (e.g., fluidized bed, etc.) | 156 | ..With control means responsive to sensed condition |
| 124 | ..With rotating gas distributor | 157 | ..With liquid level sensing means |
| 125 | ..Rotating solid sorbent bed | 158 | ...Separator inlet or outlet valve responsive to float level |
| 126 | ..With heat exchange means | 159 |Plural floats |
| 127 | ...And means for driving gas flow (e.g., pump, blower, compressor, etc.) | 160 |And temperature sensing means |
| 128 |Compressor | 161 |And pressure sensing means |
| 129 | ..Zigzag arrangement of flat solid sorbent beds for parallel flow | 162 |Plural float-controlled valves |
| 130 | ..With means for regenerating solid sorbent | 163 |At least one is gas outlet valve |
| 131 | ..Serial | 164 |And pressure sensing means |
| 132 | ...Diverse type | 165 | ...Gas outlet valve responsive to float level |
| 133 | ..Plural canisters | 166 |And pressure sensing means |
| 134 | ..Plural diverse separating means | 167 |Centrifugal separating means |
| 135 | ..At least one a dispersed or impregnated solid sorbent bed | 168 | ...Liquid outlet valve responsive to float level |
| 136 | ..Plural housings or casings for separating components | 169 |And pressure sensing means |
| 137 | ..With means to compress or compact solid sorbent bed | 170 |And recycle means (e.g., for degasified liquid, etc.) |
| 138 | ..Including means to access or replace solid sorbent | | |

| | | | |
|-----|---|-----|--|
| 171 |And tangential flow or centrifugal separating means | 205 | ..And preliminary heat exchange means |
| 172 |With pressure sensing means | 206 | ..At inlet to separator |
| 173 | ..With temperature sensing means | 207 | ...Plural, serially arranged |
| 174 | ..With pressure sensing means | 208 | ...Centrifugal type |
| 175 | .Sonic means (i.e., using sound waves) | 209 |Tangential inlet |
| 176 | .Defoaming means | 210 |Including tangential outlet |
| 177 | ..Centrifugal or rotating separator | 211 |Split or plural inlets |
| 178 | ...Having flow-through foam restrictor or eliminator (e.g., screen, etc.) | 212 |Including inner and outer casings or plural compartments |
| 179 | ..Having flow-through foam restrictor or eliminator (e.g., screen, etc.) | 213 |Tangential outlet |
| 180 | ..Having recycle means (e.g., for foam or separated liquid, etc.) | 214 |Rotating means |
| 181 | .And liquid contact means | 215 | ..Plural, serially arranged |
| 182 | .With separator for multiple liquids | 216 | ..Centrifugal type |
| 183 | ..Reservoir with three or more outlets, each for different fluid | 217 | ...Impeller or screw on rotating shaft |
| 184 | ...Horizontal reservoir | 218 | .Heat exchanger to degasify |
| 185 | ...With heat exchange means | 219 | .And fluid filter |
| 186 |And internal filter or screen (e.g., coalescer, etc.) | 220 | .Including baffle |
| 187 | .Tank or tank part movably mounted on support (e.g., for deaerating aircraft lubricating oil, etc.) | 221 | COLD WALL-HOT WALL THERMAL DIFFUSION-TYPE SEPARATOR |
| 188 | .Including means to remove mist entrained in gas | 222 | WITH MEANS TO ADD FRAGRANCE OR SCENT |
| 189 | ..Baffle, filter, or screen | 223 | WITH STERILIZING MEANS |
| 190 | ...Plural, serially arranged | 224 | .Germicidal lamp (e.g., ultraviolet light, etc.) |
| 191 |Concentric tubular members | 225 | .Heater (e.g., electrical, steam, etc.) |
| 192 |Alternate central and peripheral gas paths | 226 | .Means uses chemical antimicrobial agent |
| 193 | .Pressure reducing means | 227 | ..Liquid agent |
| 194 | ..And liquid flow modifier | 228 | WITH MEANS USING LIQUID TO CLEAN SEPARATING APPARATUS |
| 195 | ...Centrifugal type | 229 | .Movably mounted cleaning liquid distributor |
| 196 |Rotating means | 230 | .Movable separating media |
| 197 | ...Baffle | 231 | ..Immersion cleaning |
| 198 |Plural baffles in series | 232 | .Parallel vanes or baffles |
| 199 |With heat exchange means | 233 | .Filter |
| 200 | ...Spray nozzle | 234 | GAS AND LIQUID CONTACT APPARATUS FOR GAS SEPARATION INCLUDING MEANS TO REGENERATE, PURIFY, OR SEPARATE CONTACT LIQUID |
| 201 | ..With heat exchange means | 235 | .Means to add conditioning agent to contact liquid |
| 202 | .With gas contacting means | 236 | .Gravitational separator for contact liquid |
| 203 | ..Spray nozzle | 237 | ..With heavier component mechanical mover, trap, chamber, or recess in gravitational separator |
| 204 | .Liquid flow slinger, spreader, deflector, disperser, or rotation modifier | 238 | ..With lighter component removal means in gravitational separator |

| | | | |
|-----|--|-----|---|
| 239 | ..With baffle, plate, or weir within gravitational separator to aid contact liquid regeneration, purification, or separation | 270 | ...And contact liquid sprayer |
| 240 | .Filter for contact liquid | 271 | ..Means forming free-falling contact liquid curtain |
| 241 | ..Including filter adjusting or removal means | 272 | ..Means forming flowing contact liquid film on apparatus surface |
| 242 | .Heating or cooling means | 273 | ...And contact liquid sprayer |
| 243 | WITH GAS AND LIQUID CONTACT APPARATUS | 274 | ..Means to apply contact liquid to solid or porous sheet or tube |
| 244 | ..With control means responsive to sensed condition | 275 | ...Venturi passage |
| 245 | ..Contact liquid level sensing means | 276 | ...And liquid bath or reservoir for contact |
| 246 | ...By pressure sensing means | 277 | ...And contact liquid sprayer |
| 247 | ...Valve responsive to float level | 278 | ..Liquid bath or reservoir for contact |
| 248 |Plural floats | 279 | ...Submerged inlet for subsurface contact |
| 249 |Contact liquid inlet valve responsive to float level | 280 | ...And contact liquid sprayer |
| 250 |Contact liquid outlet valve responsive to float level | 281 | .Movably mounted contact liquid distributor |
| 251 | ..Temperature sensing means | 282 | ..Rotatable solid disc or surface |
| 252 | ..Gas flow rate sensing means | 283 | ...Partially immersed within contact liquid |
| 253 | ..Pressure sensing means | 284 | ...Rotation causes contact liquid to be drawn from liquid reservoir (e.g., suction, etc.) |
| 254 | ...Pressure sensitive diaphragm | 285 | ...Rotation caused by flowing contact liquid or gas |
| 255 | ..With programmed, cyclic, or time responsive control means | 286 | ..Rotatable porous disc or surface |
| 256 | .Contact liquid movement by flowing gas force | 287 | ...Partially immersed within contact liquid |
| 257 | ..Including means varying gas flow to control saturation or dispersion | 288 |Belt type |
| 258 | ..Pivotal means | 289 |Drum type |
| 259 | ...About an end | 290 | .Particulate media, shaped packing elements (e.g., Raschig rings, Berl saddles, etc.), or porous media for gas and liquid contact |
| 260 | ..Axially movable means | 291 | ..Moving |
| 261 | ...Conically or frustoconically shaped | 292 | ..In engine air inlet |
| 262 | ..Having contact liquid level maintaining means (e.g., weir, wall openings, tubes, gates, etc.) | 293 | ..In fuel dispersal means (e.g., in carburetor, etc.) |
| 263 | .For portion of total gas flow | 294 | ..Humidifier or evaporative cooler |
| 264 | ..Utilizing a valve | 295 | ..Gas dehydrator (e.g., glycol type, etc.) |
| 265 | ..Including means to control contact liquid return flow to supply or sump | 296 | ..Mesh or fabric screen, fibrous or filamentary pad, or perforated plate |
| 266 | ..With heat exchange means | 297 | ...By sprayer |
| 267 | .Diverse means for adding liquid for gas and liquid contact | 298 | ..Foam |
| 268 | ..Moving apparatus part for liquid contact | | |
| 269 | ...And liquid bath or reservoir for contact | | |

| | | | |
|-----|--|-----|--|
| 299 | ..Parallel plate, sheet, or member | 327 | ..Imperforate film supporting surface |
| 300 | ..Downstream gas separation means (e.g., mist eliminator, etc.) | 328 | ...Inclined |
| 301 | ..Fixed gas whirler or rotator for gas separation | 329 | ..Liquid bath or reservoir for contact |
| 302 | ..Having conical baffle with apex facing upstream | 330 | ..Having back pressure relief or liquid blow back trap or separator |
| 303 | ..Contact liquid applied in central gaseous flow path of concentric gaseous flow paths | 331 | ..Having antisplash means or means for retaining contact liquid during upset or tilt |
| 304 | ...Baffle, vane, or plate in outer gaseous flow path | 332 | ..With movable agitator in bath or reservoir for commingling gas and liquid |
| 305 | ...Baffle, vane, or plate in central gaseous flow path | 333 | ..Nonliquid gas separator positioned above liquid bath or reservoir |
| 306 | ..Liquid contact preceding whirler or rotator | 334 | ...Having means for forming contact liquid into spray or heap |
| 307 | ...Means forming free-falling contact liquid curtain | 335 |Central downward gas inlet |
| 308 | ...Means forming flowing contact liquid film on apparatus surface | 336 |Gas flows tangentially to liquid surface |
| 309 | ...Liquid bath or reservoir for contact | 337 | ...Superposed filter |
| 310 |And downstream filter | 338 |Having flow guide preventing entire filter face contact by gas flow |
| 311 | ...Contact liquid spray | 339 |Surrounding gas flow path |
| 312 |Within a venturi passage | 340 |Submerged inlet for subsurface contact |
| 313 |Tangential gas inlet into whirler or rotator | 341 |And separable liquid sump |
| 314 | ..Liquid contact within whirler or rotator | 342 |Submerged inlet for subsurface contact |
| 315 | ..Means forming free-falling contact liquid curtain | 343 |Multiple outlet orifices in submerged inlet |
| 316 | ..Means forming flowing contact liquid film on apparatus surface | 344 |Perforated pipe |
| 317 | ...Liquid bath or reservoir for contact | 345 |Perforated plate |
| 318 |And downstream filter | 346 |Submerged baffle |
| 319 | ...Contact liquid spray | 347 |Gas flows tangentially to liquid surface |
| 320 |Baffle means for producing or aiding contact liquid spray formation | 348 | ...Superposed stationary deflector |
| 321 | ..Having tangential gaseous fluid mixture inlet | 349 |Flow reversal |
| 322 | ..Means forming flowing contact liquid film on apparatus surface or free-falling contact liquid curtain for gas and liquid contact | 350 |Tortuous path |
| 323 | ..Venturi type | 351 | ..Submerged inlet for subsurface contact |
| 324 | ..Curved impingement surface | 352 | ...Multiple outlet orifices in submerged inlet |
| 325 | ..Impingement baffle or pan | 353 |Perforated pipe |
| 326 | ..Liquid flow surface perforated for gas flow therethrough | 354 |Perforated plate |
| | | 355 | ..Nonliquid gas separating means downstream of liquid contact means |
| | | 356 | ..Parallel vanes or baffles |
| | | 357 | ...And diverse separating means |

| | | | |
|-----|--|-----|---|
| 358 | ..Overlapping vanes or baffles | 398 | .Ejection of residue container or separating unit (e.g., filter or bag, etc.) |
| 359 | ..Moving centrifugal separator | | |
| 360 | ..Impact vane, baffle, or wall | 399 | .Gas cutoff or diversion |
| 361 | ..Filter | 400 | ..Gas pressure responsive means |
| 362 | ...Perforated plate | 401 | ...And temperature responsive means |
| 363 | ...Mesh or fabric screen | 402 | ...Plural gas pressure responsive means |
| 364 | ...Fibrous or filamentary pad | | |
| 365 | ..And preliminary separating means | 403 | ...For vacuum producing means (e.g., vacuum cleaner, etc.) |
| 366 | ..Deflector upstream of liquid contact means | 404 | ..Collecting bag presence responsive means |
| 367 | ..Imperforate, impermeable baffle | 405 | ..By response to accumulated separated liquids or solids |
| 368 | ...Conical | 406 | ...By float |
| 369 | ...Ribbed or corrugated | 407 | ..Temperature or humidity responsive |
| 370 | ...Angled or inclined | | |
| 371 | ..Filter upstream of liquid contact means | 408 | .Regulation of separated constituent discharge |
| 372 | INCLUDING INLET MEANS FOR DIVERSE GAS OR SOLID FOR GAS TREATMENT | 409 | ..By liquid accumulation responsive float |
| 373 | ..Solid or vaporized solid | 410 | ...Side discharge from reservoir |
| 374 | ..Steam is diverse gas | 411 |Control valve in line external to reservoir |
| 375 | ..Added into combustion products | 412 | ...Control valve in external bottom discharge line from reservoir |
| 376 | ..To effect particle removal (e.g., dust removal, etc.) | | |
| 377 | ..And outlet for condensed vapors | 413 | WITH SAMPLING MEANS |
| 378 | ..Downstream of separator | 414 | WITH INSPECTION MEANS |
| 379 | ..And gas regulation for each inflowing gas | 415 | .Translucent |
| 380 | WITH SOUND DAMPING MEANS (I.E., NOISE ATTENUATION) | 416 | .Transparent |
| 381 | ..Sound absorbing material | 417 | WITH SIGNALS, INDICATORS, MEASURING, OR TESTING MEANS |
| 382 | ..For vacuum cleaner | | |
| 383 | ..For internal combustion engine | 418 | .Light signal |
| 384 | ..Sound attenuating gas flow path | 419 | .Sound signal |
| 385 | ..Baffle in flow path | 420 | .Temperature measuring means |
| 386 | ...For internal combustion engine | 421 | .Pressure measuring means |
| 387 | ..Perforated surface | 422 | .Gas flow rate measuring means |
| 388 | ..Expansion chamber | 423 | .Position measuring means |
| 389 | SONIC MEANS (I.E., USING SOUND WAVES) | 424 | WITH TIMING OR CHANGEABLE PROGRAMMING MEANS |
| 390 | SHELF OR EDGE TYPE | | |
| 391 | ..Helical or spiral wound strip | 425 | .Of cleaning mechanism for separating media |
| 392 | ..Parallel plates or discs | 426 | ..Sequential cleaning of plural separating media |
| 393 | ..Grooved or slotted | 427 | ...Multiple bag-type filters in chamber |
| 394 | ..Having fibrous filter material or porous structure | 428 | ..For control of pneumatic reverse flushing |
| 395 | ..Nap-like or pile-like material | 429 | .For advancing filter media |
| 396 | WITH DRIP OR ESCAPING MATERIAL, OTHER THAN SEPARATED CONSTITUENT, COLLECTOR | | |
| 397 | WITH CONTROL MEANS RESPONSIVE TO SENSED CONDITION FOR CONTROL OF GAS FLOW OR NONGASEOUS CONSTITUENT DISCHARGE | | |

FOREIGN ART COLLECTIONS**FOR CLASS-RELATED FOREIGN DOCUMENTS**

FOR 100 **COLD WALL-HOT WALL THERMAL
DIFFUSION TYPE SEPARATOR (55/
209)**

FOR 101 **WITH AUTOMATIC CONTROL MEANS FOR
GAS OR NONGASEOUS CONSTITUENT
DISCHARGE (55/210)**

FOR 102 .Ejection of residue container or
separating unit (e.g., filter
or bag) (55/211)

FOR 103 .Gas cutoff or diversion (55/212)

FOR 104 ..Gas pressure responsive
separate reactor surface means
(55/213)

FOR 105 ..Bag presence responsive means
(55/214)

FOR 106 ..By response to accumulated
separated liquids (55/215)

FOR 107 ...By float (55/216)

FOR 108 ..Temperature or humidity
responsive (55/217)

FOR 109 .Regulation of separated
constituent discharge (55/218)

FOR 110 ..By liquid accumulation
responsive float (55/219)

FOR 111 **WITH LIQUID CONTACTING MEANS
(E.G., GAS OR MEDIA CLEANING)
(55/220)**

FOR 112 .With indirect heat exchange
means for gas (55/222)

FOR 113 .Diverse means for contacting or
applying liquid (55/223)

FOR 114 .For portion of total gas flow
(55/224)

FOR 115 .Liquid control responsive to
flowing gas force (55/225)

FOR 116 .With means varying gas flow to
control saturation or
dispersion (55/226)

FOR 117 .With treating liquid automatic
control or level maintaining
means (55/227)

FOR 118 .With treating liquid
conditioning or separating
means (55/225)

FOR 119 .With means to control liquid
return flow to supply or sump
(55/229)

FOR 120 .Movably mounted liquid
distributor (e.g., moving
nozzle) (55/230)

FOR 121 ..Distributor is gas contacting
means (e.g., wet pad) (55/231)

FOR 122 ...With distributor immersing
means (55/232)

FOR 123 .Liquid applied to particulate or
porous media for gas contact
(55/233)

FOR 124 ..Media extends into bath (55/
234)

FOR 125 .With fixed gas whirler or
rotator means for gas
separation (55/235)

FOR 126 ..Liquid applied in central of
concentric flow paths (55/236)

FOR 127 ..Liquid contact preceding or
within whirler or rotator
means (55/237)

FOR 128 ...Spray or film contact (55/238)

FOR 129 ..Reversal of gas flow by surface
of body of liquid (55/239)

FOR 130 .With means forming flowing
liquid film or sheet for gas
contact (55/240)

FOR 131 ..On impervious backing (e.g.,
corrugated plates) (55/241)

FOR 132 .With liquid cleaning or flushing
means for media (55/242)

FOR 133 ..Immersion cleaning (55/243)

FOR 134 .Gas flow contacts liquid bath
(55/244)

FOR 135 ..With back pressure relief or
auxiliary liquid trap or
baffle (55/245)

FOR 136 ..With antisplash means or means
for retaining liquid during
upset or tilt (55/246)

FOR 137 ..With movable means in bath for
commingling gas and liquid
(55/247)

FOR 138 ..Separator positioned above
liquid bath (55/245)

FOR 139 ...With means for forming liquid
into a spray or heap (55/249)

FOR 140 ...Superposed filter (55/250)

FOR 141With flow guide preventing
entire leading surface contact
(55/251)

FOR 142Surrounding gas flow path
(55/252)

FOR 143With separable liquid sump
(55/253)

FOR 144With anticreep means (55/
254)

- FOR 145Submerged inlet for
subsurface contact of liquid
(55/255)
- FOR 146 ..Submerged inlet for subsurface
contact (55/256)
- FOR 147 .Gas separating means downstream
of contacting means (55/257.1)
- FOR 148 ..Parallel vanes (55/257.2)
- FOR 149 ..Overlapping vanes (55/257.3)
- FOR 150 ..Centrifugal (55/257.4)
- FOR 151 ..Impact plate (55/257.5)
- FOR 152 ..Perforated plate (55/257.6)
- FOR 153 ..Heat exchange (55/257.7)
- FOR 154 ..With preliminary separating
means (55/258)
- FOR 155 ..Filter type separating means
(55/259)
- FOR 156 .With deflecting means
preliminary to liquid contact
(55/260)
- FOR 157 **WITH INLET MEANS FOR DIVERSE
FLUID OR SOLID FOR GAS
TREATMENT (55/261)**
- FOR 158 .Solid or vaporized solid (55/
262)
- FOR 159 .Steam (55/263)
- FOR 160 .With outlet for condensed vapors
(55/264)
- FOR 161 .Downstream of separator (55/265)
- FOR 162 .With flow control for each
inflow gas (55/266)
- FOR 163 **WITH HEATING OR COOLING MEANS FOR
GAS, OR WITH INSULATION (55/
267)**
- FOR 164 .Two confined fluids in indirect
contact (55/268)
- FOR 165 ..Heat exchanger is part of
separator or is contiguous
therewith (55/269)
- FOR 166 **WITH SAMPLING, WEIGHTING,
TESTING, OR METERING MEANS
(55/270)**
- FOR 167 **WITH TIMING OR CHANGEABLE
PROGRAMMING MEANS (55/271)**
- FOR 168 .Of cleaning mechanism for media
(55/272)
- FOR 169 ..Sequential cleaning of plural
units (55/273)
- FOR 170 **WITH SIGNALS AND INDICATORS
(E.G., INSPECTION MEANS) (55/
274)**
- FOR 171 .Moisture sensitive (55/275)
- FOR 172 **WITH SOUND DAMPING OR ACOUSTICAL
MEANS (I.E., NOISE
ATTENUATION) (55/276)**
- FOR 173 **SONIC TYPE (55/277)**
- FOR 174 **SHELF OR EDGE TYPE (55/278)**
- FOR 175 **WITH STERILIZING MEANS (55/279)**
- FOR 176 **WITH DRIP OR ESCAPING MATERIAL
COLLECTOR (NOT OF SEPARATED
CONSTITUENT AS SUCH) (55/280)**

